bottom of the cabinet. With four to five pounds of pressure it requires but a slight turn of the valve to give all the steam needed. If too much steam is turned on, there will be considerable leakage and this is to be avoided. We make our drawers so that when slightly heaped they hold, as indicated above, just about half a bushel of soil. This is as much soil as one wants to lift about. Those who have had the experience of lifting two or three bushel bags of sloppy soil out of an autoclave know something of the back-breaking feature of this job. Furthermore, breaking the soil up in small quantities gives the steam opportunity to penetrate it. This is further aided by the wire mesh bottom of the drawers. A piece of single thick burlap is placed in the bottom of each drawer.

The drawers when put into the cabinet are staggered - that is, the first drawer at the bottom of the box or cabinet is pushed all the way in, the second is left about an inch from the back of the box, and the next one is pushed in. This gives the steam a chance to follow up, over, and under each drawer. We find by experience that one hour's steaming as described will effectively destroy nematodes and mycelium and spores of the more common fungi infesting the soil. The temperature of the treated soil for the last thirty minutes will average 80° to 85° C. Many tests have been made with the common nematode, *Heterodera radicicola*. Fragments of infested roots and the whole root growth of numerous plants badly infested with the nematodes have been buried in the soil and subjected to the treatment as outlined. In all cases the nematodes have been killed. Furthermore, no nematodes have been found on the roots of plants grown in treated soil, although thousands of plants have been examined. Soil treated by this method does not become soggy. It comes out of the cabinet in excellent physical condition, mealy, and of good texture. No good gardener will object to it as a potting soil if it is in good condition when put into the apparatus. The soil should not be steamed when overwet.

2. **The Can Method of Soil Treatment.** (Pl. 318.) There are many places and times when it is important to treat a small quantity of soil and when steam boilers are not available or in operation. To meet such a contingency we use a simple and inexpensive outfit consisting of a large galvanized can provided with a lid, a simple steam generator consisting of a baking pan provided with a special lid, and a two-burner oil or gas stove. The apparatus assembled and taken apart is shown in the figure. The steam generating part of this apparatus was developed by the Dairy Division, Bureau of Animal Industry, U. S. Department of Agriculture, and is designed primarily for the sterilization of milk cans and milk receptacles. The soil to be heated is properly mixed and sifted, and then put in half-bushel bags. A false bottom made of wooden slats is put in the galvanized can. The false bottom stands